Table of Ag Order Requirements

Authority	Legal Requirement	Confirmation of Compliance (monitoring/reporting)	Point of Compliance	Milestone(s) to Measure Progress	Time to Compliance
Porter- Cologne, Basin Plan	Eliminate toxic discharges of agricultural pesticides to surface waters and groundwater ¹				
Porter- Cologne, Basin Plan	Reduce nutrient discharges to surface waters to meet nutrient standards ²				
Porter- Cologne, Basin Plan	Reduce nutrient discharges to groundwater to meet groundwater standards ³				
Porter- Cologne, Basin Plan	Minimize sediment discharges from agricultural lands ⁴				
Porter- Cologne, Basin Plan	Protect aquatic habitat ⁵				

Footnote 1

Basin Plan Sec. II.A.2.a. -- Narrative Pesticide Objective for all Inland Surface Waters, Enclosed Bays, and Estuaries "No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

For waters where existing concentrations are presently nondetectable or where beneficial uses would be impaired by concentrations in excess of nondetectable levels, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods prescribed in Standard Methods for the Examination of Water and Wastewater, latest edition, or other equivalent methods approved by the Executive Officer."

Basin Plan Sec. II.A.2.a. -- Narrative Toxicity Objective for all Inland Surface Waters, Enclosed Bays, and Estuaries "All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board."

Basin Plan Sec. II.A.2.a -- Numeric Pesticide Objectives for the protection of MUN in non-ocean surface waters "All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1."

<u>Basin Plan Sec. II.A.4.a -- Numeric Pesticide Objectives for the protection of MUN in groundwaters</u>
"Groundwaters shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1."

The Basin Plan cites by reference the California drinking water Maximum Contaminant Levels (MCL) for organic chemicals, including pesticides: Alachlor, Atrazine, Bentazon, Benzo(a)pyrene, Carbofuran, Chlordane, 2,4-D, Dalapon, Dibromochloropropane, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dinoseb, Diquat, Endothall, Endrin, Ethylene Dibromide, Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Molinate, Oxamyl, Pentachlorophenol, Picloram, Polychlorinated Biphenyls, Simazine, Thiobencarb, Toxaphene, 2,3,7,8-TCDD (Dioxin), and 2,4,5-TP (Silvex).

Footnote 2

Basin Plan Chapter 2, Sec. II.A.2.a. - Narrative Biostimulatory Substances Objective

"Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses."

Basin Plan Chapter 2, Sec. II.A.2.a. - Numeric Unionized Ammonia Objective

"The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters."

Basin Plan Chapter 2, Sec. II.A.2.a -- Numeric Nitrate and Nitrite Objectives for the protection of MUN in non-ocean surface waters

"Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2."

The MCL for Nitrate (as NO3) is 45 mg/L. The MCL for Nitrate + Nitrite (sum as N) is 10 mg/L. The MCL for nitrite (as N) is 1 mg/L.

<u>Basin Plan Chapter 2, Sec. II.A.2.a</u> -- <u>Numeric Objectives for the protection of AGR in non-ocean surface waters</u> "Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3- 3.

In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3 4."

Guideline objectives in Table 3-3 for ammonia and nitrate are as follows: no problem < 5 mg/L, increasing problem 5 – 30 mg/L, severe > 30 mg/L. Maximum concentrations for livestock watering in Table 3-4 are as follows: nitrate + nitrite 100 mg/L, nitrite 10 mgL.

Footnote 3

Basin Plan Chapter 2, Sec. II.A.4.a -- Numeric Nitrate and Nitrite Objectives for the protection of MUN in groundwaters

"Groundwaters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Chapter 15, Article 4, Section 64435, Tables 2 and 3." Same as Table 3-2.

The MCL for Nitrate (as NO3) is 45 mg/L. The MCL for Nitrate + Nitrite (sum as N) is 10 mg/L. The MCL for nitrite (as N) is 1 mg/L.

Basin Plan Chapter 2, Sec. II.A.4.a -- Numeric Nitrate and Nitrite Objectives for the protection of AGR in groundwaters "Groundwaters shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3.

In addition, water used for irrigation and livestock watering shall not exceed the concentrations for those chemicals listed in Table 3-4."

Basin Plan Chapter 2, Sec. II.A.5. Numeric Nitrogen Objectives for specific groundwaters

"Certain water quality objectives have been established for selected groundwaters; these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. The median values for groundwaters are shown in Table 3-8." Nitrogen (as N) water quality objectives for specific ground waters range from 1 to 8 mg/L.

Footnote 4

Basin Plan Chapter 2, Sec. II.A.2 - Narrative Sediment Objective

"The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses."

Basin Plan Chapter 5, Sec. III.G. -- Sedimentation and Erosion Control

"Regulation of sediment discharges from routine annual agricultural operations, such as tilling, grazing, and land grading and from construction of agricultural buildings is waived except where such activity is causing severe erosion and causing, or threatening to cause, a pollution or nuisance."

Basin Plan Chapter 5, Sec. V.G.4 -- Erosion and Sedimentation Control Actions

"A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip shall be thirty feet, wherever possible as measured along the ground surface to the highest anticipated water line."

Basin Plan Chapter 5, Sec. V.G.6 -- Erosion and Sedimentation Control Actions

"Cover crops shall be established by seeding and/or mulching, or other equally effective measures, for all disturbed areas not otherwise protected from excessive erosion."

Footnote 5

Basin Plan Chapter 2, Sec. II. – Water Quality Objectives to Protect Beneficial Uses including aquatic habitats "Water quality objectives are considered to be necessary to protect those present and probable future beneficial uses enumerated in Chapter Two of this plan and to protect existing high quality waters of the State. These objectives will be achieved primarily through the establishment of waste discharge requirements and through implementation of this water quality control plan."

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